

**I CLAIM:**

1. A distributed knowledge and process base providing multiple-user access via a plurality of client devices to data, processes, and services, said base comprising:

5 a plurality of distributed object technology systems (DOTS) communicating over a network and providing multi-level privilege-based access to a plurality of users via client devices, each of the DOTS having:

10 (a) a plurality of system elements including processes, data, and services to users; and

15 (b) **system methods** associated with all system elements enabling addition of new system elements and modification of the functionality and content of existing system elements; said system methods also enabling:

(i) creation and modification of user roles defining default settings limiting access and available functions for the role;

(ii) assignment of roles to users and groups of users; and

(iii) selected overriding of the default settings for individual users and groups of users.

2. The distributed knowledge and process base of claim 1 wherein each system element has an assigned security type, access level, and usage property that reflects the frequency of usage of the system element and an evaluation grade by users.

3. The distributed knowledge and process base of claim 2 wherein system element usage properties comprise:

- (i) usage value summaries based on user evaluations and usage of the system element
- 5 (ii) bookmarks set by individual users or groups to indicate favorite system elements;
- (iii) new usage indicators set to distinguish used system elements from new system elements for individual users or groups;
- 10 (iv) trash flags indicating when a system element has been removed.

4. The distributed knowledge and process base of claim 1 wherein each DOTS further comprises an access controller providing access to system elements with the DOTS, and generating access negotiation requests to other DOTS based on user and group privileges and system element properties.

5. The distributed knowledge and process base of claim 4 wherein the access negotiation request includes at least data describing a requestor; requested system element and its owner; and a list of access negotiation requests by the requested system element owner toward system elements owned by the requestor.

6. The distributed knowledge and process base of claim 1 wherein the system methods further enable:

- creation and modification of security types for system elements;
- 5 assignment of default access levels and functions available for a role accessing a system element with a specific security type; and

modification of system element usage properties based on user evaluation and usage of the system element.

7. The distributed knowledge and process base of claim 1 wherein each DOTS further comprises a core defining a unified set of system operations applicable to all system elements.
8. The distributed knowledge and process base of claim 1 wherein the services provided by the system elements are selected from the group consisting of an email service, an address book service, a calendar service, a linked knowledge service, a database, a file management service, a conference service, a task manager service, and a match-maker service.
9. The distributed knowledge and process base of claim 1 wherein each DOTS further comprises a thematic search controller to search for system elements with selected parameters.
10. The distributed knowledge and process base of claim 9 wherein the thematic search controller searches system elements across a plurality of DOTS.
11. The distributed knowledge and process base of claim 1 wherein the system methods are consistently defined across all of the DOTS.
12. The distributed knowledge and process base of claim 1 wherein at least one of the DOTS can be accessed by a user using a browser as the client device.

13. The distributed knowledge and process base of claim 1 wherein each DOTS further comprises a repeated actions scheduler enabling users to schedule periodic system operations.

14. The distributed knowledge and process base of claim 1 wherein at least one of the DOTS further comprises an action object defined by an executing environment descriptor and an action statement executable in this environment.

15. The distributed knowledge and process base of claim 1 wherein at least one of the DOTS further comprises a remote control scenario defined by a set of remote action objects and a sequence of conditional operations executed on the remote action objects.

16. The distributed knowledge and process base of claim 1 wherein at least one of the DOTS further comprises a notification block to notify users about selected events.

17. A distributed knowledge and process base providing multiple-user access via a plurality of client devices to data, processes, and services, said base comprising:

5 a plurality of distributed object technology systems (DOTS) communicating over a network and providing multi-level privilege-based access to a plurality of users via client devices, each of the DOTS having:

(a) a plurality of system elements including processes, data and services to users;

10 (b) a core having:

(i) an access controller providing privilege-based access by users to the system elements; and

(ii) a thematic search controller to search within a DOT and across a plurality of DOTS for system elements with selected parameters.

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18. The distributed knowledge and process base of claim 17 wherein at least one of the DOTS can be accessed by a user using a browser as the client device.

19. The distributed knowledge and process base of claim 17 wherein the services provided by the system elements are selected from the group consisting of an email service, an address book service, a calendar service, a linked knowledge service, a database, a file management service, a conference service, a task manager service, and a match-maker service.

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20. The distributed knowledge and process base of claim 17 further comprising system methods associated with each system element that are consistently defined across all of the DOTS.

21. A distributed knowledge and process base providing multiple-user access via a plurality of client devices to data, processes, and services, said base comprising:

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a plurality of distributed object technology systems (DOTS) communicating over a network and providing multi-level privilege-based access to a plurality of users via client devices, each of the DOTS having:

(a) a plurality of system elements including processes, data,

and services to users; and

10 (b) a core wherein system methods associated with system elements are consistently defined across all of the DOTS to enable addition of new system elements and modification of the functionality and content of existing system elements, creation and modification of user roles defining access limitations and available functions for the 15 role, and assignment of roles to users and groups of users; said core having:

(i) an access controller providing privilege-based access by users to the system elements; and

20 (ii) a thematic search controller to search within a DOT and across a plurality of DOTS for system elements with selected parameters.

22. The distributed knowledge and process base of claim 21 wherein at least one of the DOTS can be accessed by a user using a browser as the client device.

23. The distributed knowledge and process base of claim 21 wherein the services provided by the system elements are selected from the group consisting of an email service, an address book service, a calendar service, a linked knowledge service, a database, a 5 file management service, a conference service, a task manager service, and a match-maker service.